

A Puzzle Pattern

The following activity was created by JoLeigh Honey of Salt Lake City, Utah, and Winne Miller of Lake Oswego, Oregon at a TI-Nspire workshop. The idea of the problem solving task originated from the Teacher to Teacher publication, *Making Sense of Problem Solving*. TI-Nspire is the latest in the family of Texas Instrument Graphing Calculators and is called a handheld because of its amazing capabilities as a graphing calculator, geometer sketchpad, and a computer for creating dynamic worksheets for your students. This unit is reprinted with permission from Teacher to Teacher Publication.

Overview: Students will analyze patterns and represent them using tables and graphs and equations. The activity will include a warm up, a problem solving task, and an extension.

Concepts: multiple representations analyze patterns, solve linear equations

Materials Needed: tiles, *A Puzzle Pattern* blackline masters, TI-Nspire document puzzle patterns.tns.

WARM UP

Find the total number of tiles used in this pattern without counting the tiles one by one. Verify your total by using another method.

